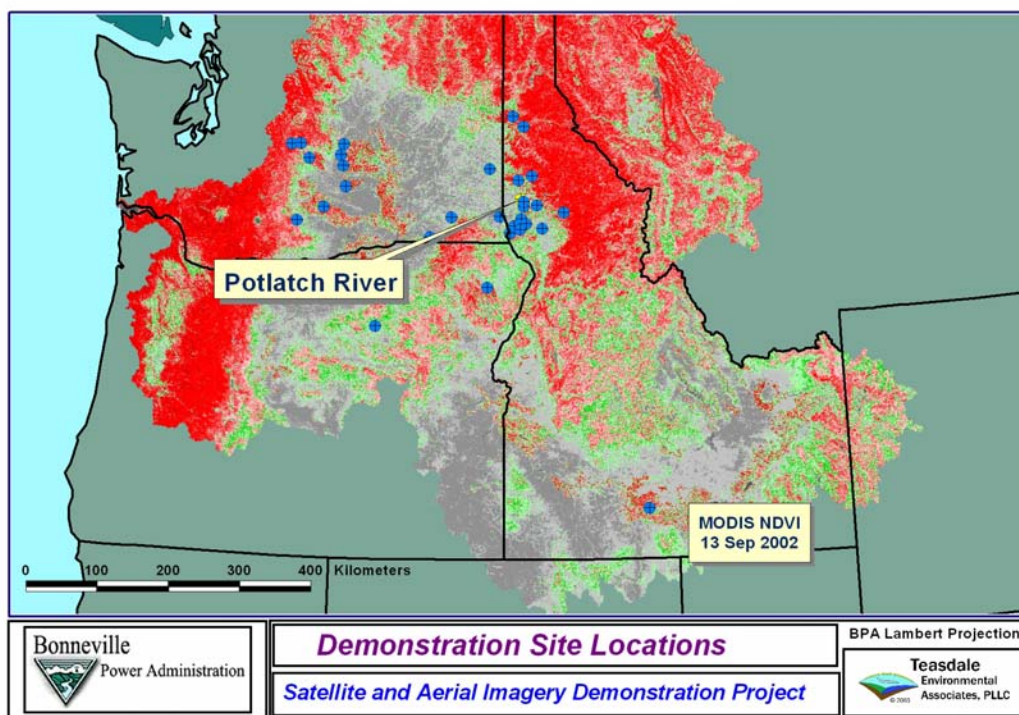


Potlatch River Demonstration Site

Location	Nez Perce and Latah Counties, ID, Nez Perce Reservation
Water body	Potlatch River
Ecological Provenance	Mountain Snake
Subbasin Name	Clearwater
BPA Hydrologic Unit Code ID	3562
Hydrologic Unit Code, 6 th Level	170603060301
Watershed Name	Clearwater, ID



Unique Characteristics

The lower Potlatch River is an alluvial stream within steep canyon lands. Cobble size bed materials of the channel are highly mobile during significant hydrologic events. A pool and riffle structure is well established though at irregular spacing. Rosgen channel type is C3. The riparian zone and flood plain are narrow to broad and transitions to seasonally dry canyon land vegetation.

Satellite imagery for this site include Landsat 5, Landsat 7, ASTER, MTI, Ikonos. Digital color and color infrared aerial imagery was acquired on

several flights in 2001 through 2003. Ancillary data includes topographic DRG's, DOQ's, watershed boundaries and national land cover data.

Objective

The primary objective was to acquire seasonal very high-resolution digital color and color CIR aerial imagery of the lower Potlatch River riparian zone and evaluate changes in stream morphology and vegetation development. The aerial imagery was to provide ground truth information for satellite imagery. A secondary objective was to review the record of historic aerial photography and track changes in channel alignment.

Results

The aerial imagery and supporting data reveal the characteristics of riparian vegetation and stream channel, status of riparian plantings, stream improvement structures, proximity of development. Stream channel migration is evident in historic imagery. Stream morphology and riparian details were observed in the satellite imagery at levels of detail commensurate with the resolution of the sensor. The finest detail was seen in the IKONOS and MTI imagery. The historic sequence of Landsat images showed the progress of riparian vegetation disturbance and growth.